ANNUAL REPORT OF THE DIRECTOR OF COMMUNICATIONS RESEARCH

1. A series of detailed technical reports was prepared, based upon observations made during a visit to England, in April - June, 1943, where the operations of GC & CS organizations at Bletchley Park and Berkeley Street were studied. These reports have been useful to key SSA personnel in giving them an understanding and working knowledge of certain highly complicated cryptanalytic operations carried on by the British.

2. Beginning in the latter part of January 1944 preparations were made by the SSA to hold the Second Conference on Japanese Army Communications at Arlington Hall Station. The undersigned was selected as Chairman of the Conference, which opened on 13 March 1944 and completed its work on 24 March 1944. The agreements reached by the Conference have had and will continue to have an important influence upon successful work on Japanese Army Communications. The final book of documents issued by the Conference embraced 52 numbered documents comprising approximately 231 pages.

3. Throughout the year the undersigned served as special adviser to the Commanding Officer of the Signal Security Agency in many important matters affecting its cryptographic and cryptanalytic activities. Several staff studies were prepared for the Commanding Officer on important subjects requiring action by the War Department General Staff. Affirmative or satisfactory action resulted in practically all cases.

4. Special cryptographic security studies undertaken by or assigned to the Signal Security Agency were technically directed and coordinated. In particular, a resurvey of the cryptographic systems and related procedures employed by the Department of State was made at the request of the Secretary of State and appropriate recommendations submitted through War Department channels. In the late spring, the undersigned was designated by the Joint Communications Board of the Joint Chiefs of Staff to be a member of a special committee of four to investigate the cryptographic security and related procedures employed by all non-military Departments and Agencies of the Government. These studies are still in progress.

5. In connection with the study of the cryptographic systems of the Department of State the undersigned drew up a plan for improvement therein, involving, among other things, obtaining War Department approval of making available to the Department of State a new high-grade cryptographic machine. The new system will go into effect within a short time throughout practically all the posts of the Department of State, at home and abroad. The provision of these machines will greatly increase the security of the communications of that Department.

6. Throughout the year the undersigned served as staff coordinator and supervisor of the activities of the operating

branches in communications research and experimental work on cryptanalytic and cryptographic methods and apparatus. Special studies were coordinated and relations with F Branch have been particularly close in this field.

7. A considerable amount of assistance was rendered to F and C Branches in connection with the development, production, and distribution of cryptographic items, including Converter M-325. Patent application papers were drawn up covering the latter device, invented by the undersigned. An automatic, high-speed model of the device, incorporated in a SIGABA chassis was also constructed by F Branch at his suggestion and has proved to be practicable. Plans are now under way for quantity production of this form of Converter M-325.

8. In January 1944, Captain Mark Rhoads, U.S.A., Retired, joined the SSA in a civilian capacity as Cryptanalyst and was appointed Assistant Director of Communications Research.

9. On 11 March 1944 the undersigned was granted the War Department Exceptional Civilian Service Award, being among the first persons to be so honored in the whole of the civilian service in the Department.

William F. Friedman

26 June 44

William F. Friedman,
Director of Communications
Research.